



**WASTE DISPOSAL, INC., SUPERFUND SITE  
Santa Fe Springs, California**

**STATUS OF ENVIRONMENTAL INVESTIGATIONS  
1988-1998  
for Parcel  
APN 8167-002-025**

This Status of Environmental Investigations Report for Parcel 025 includes a summary of parcel ownership and environmental data for the subject land parcel. The report incorporates information from a variety of sources and organizations collected over a 10-year period during the various investigations of the Waste Disposal, Inc. Superfund Site. During development of the report, the U.S. Environmental Protection Agency made extensive efforts to verify the accuracy of the contents. However, there remains a potential for error originating from the numerous information sources themselves, or in the transcription of those sources. Sources not included or referenced in this report may also exist that could modify or update the conclusions contained in this report. The reader is cautioned to review the original source materials stated in the bibliography and additional sources that may be in the public record before drawing any conclusions regarding the absence or extent of contamination and wastes present within an individual site parcel. In addition, not all areas of each parcel were investigated during the referenced studies. The absence of data or investigative activities for areas of parcels should not be interpreted as meaning that any given area of a parcel does not contain buried wastes. Additional investigation may be warranted to confirm the absence or presence of wastes in any specific location within a parcel. Accordingly, this report is not intended to be singly relied on by any person or entity for any purpose. This report is intended to be a general summation and analysis only of the sources included or referenced herein. The U.S. Environmental Protection Agency is not responsible for the ultimate accuracy of this report nor for any reliance thereon. This report is not an order or final agency action.

December 2000

U.S. ENVIRONMENTAL PROTECTION AGENCY  
Region 9  
75 Hawthorne Street  
San Francisco, California 94105

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**PARCEL SUMMARY:**

Assessor's Parcel Number 8167-002-025

Title search was conducted for the period covering January 1, 1920 to February 5, 1997

**BUILDING ADDRESS:**

None

**CURRENT OWNER:**

Pitts Family Trust, as of May 3, 1983 and The Adeline R. Bennett, M.D. Trust, since May 2, 1989

A complete chain of title, which is current through February 5, 1997, is included as Attachment 1 of this report.

## **INTRODUCTION**

Parcel 8167-002-025 (Parcel 25) is one of 22 land parcels that collectively comprise the Waste Disposal, Inc. (WDI) Superfund Site (Figure 1). These 22 land parcels were identified by the U.S. Environmental Protection Agency (EPA) in July of 1987 as requiring investigation under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) due to the prior use of the properties for waste disposal activities. This determination resulted in the WDI site's being placed on the National Priorities List (NPL) of hazardous waste sites for investigation and cleanup under CERCLA.

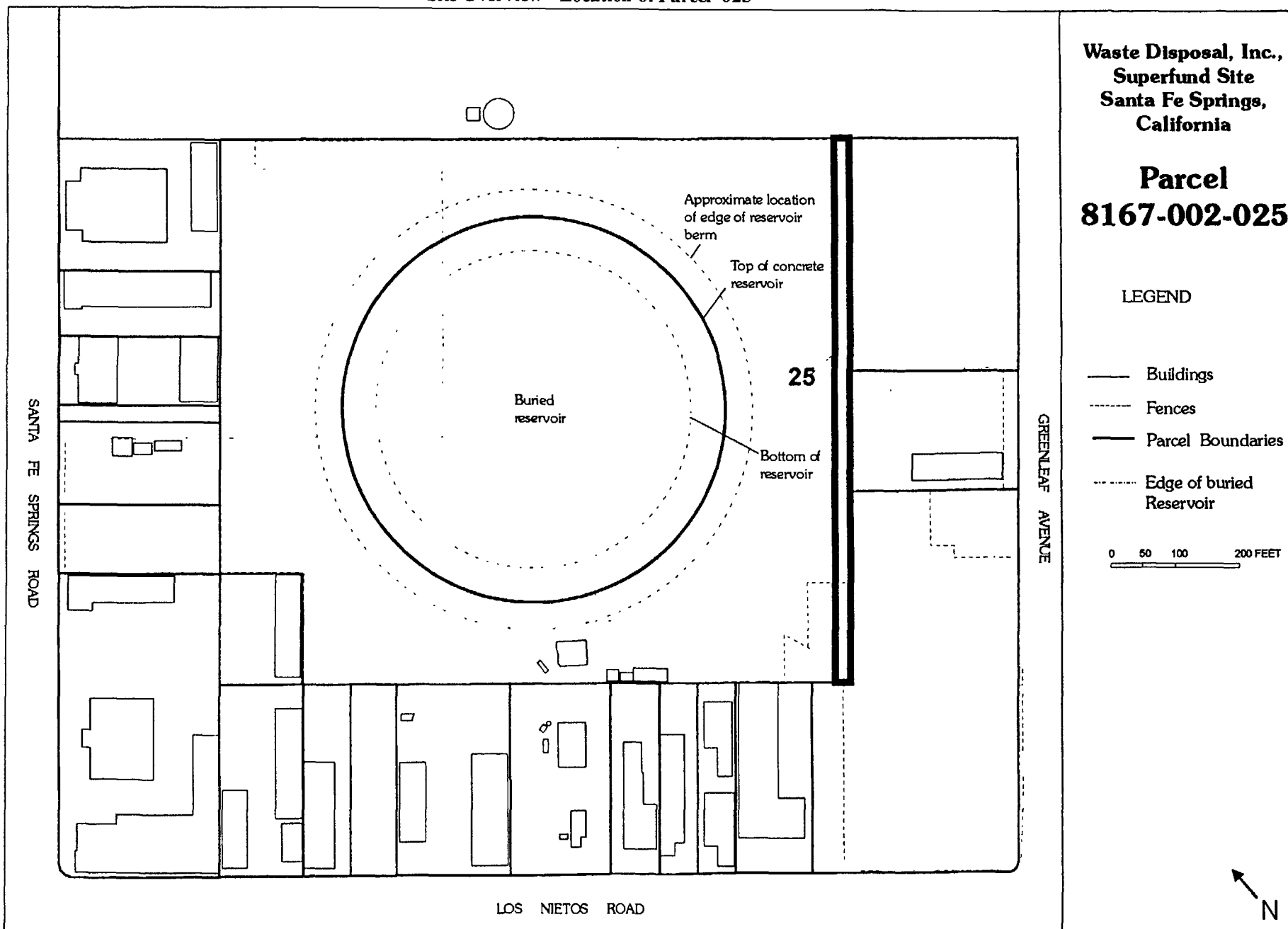
The main feature of the approximately 43-acre WDI site is a buried 42-million gallon concrete-lined reservoir in the center of the site that was constructed by 1924 as a covered container for crude petroleum storage. The areas outside of and adjacent to the reservoir began to be used for the unregulated disposal of a variety of liquid and solid wastes and the possible storage and mixing of drilling muds by the late 1920s. Between 1937 and 1941, the reservoir cover was removed. After the removal of the reservoir cover, from the early to mid 1940s onward; the reservoir began to be used for the disposal of wastes.

The site operated under a disposal permit beginning in 1949 until at least 1964, and operated perhaps for two to three years afterward. Permitted wastes included rotary drilling muds, clean earth, rock, sand, gravel, paving fragments, concrete, brick, plaster, steel mill slag, dry mud cake from oil field sumps, and acetylene sludge. Investigations have shown that disposed materials also included, but were not limited to, the following unpermitted wastes: organic wastes, oil refinery wastes, solvents, petroleum-related chemicals, and other chemical wastes. Wastes were disposed within the reservoir and on site areas adjacent to the reservoir.

During the 1950s, while disposal activities continued, the reservoir and some of the adjacent and surrounding areas began to be covered with fill material. Some of the perimeter areas of the site outside the reservoir began to be developed for commercial and industrial use. By 1963, the reservoir was covered with fill and by 1964, most, although not all, disposal activities appeared to have ceased. Grading of the fill cover continued until 1966. Currently, more than 20 buildings containing small businesses operate along the perimeter edges of three sides of the site.

In 1988, EPA began the remedial investigation (RI) of the site to determine the extent of buried wastes, and the presence of chemical wastes in soil, soil gas, and groundwater. This work involved drilling soil borings for soil sample collection and the installation of soil vapor and groundwater monitoring wells. EPA used the information collected during the RI to evaluate remedial alternatives in the WDI Feasibility Study Report, issued in 1993. Because the burial of wastes at the site makes it a landfill, EPA identified as the selected remedy in the 1993 Record of Decision (ROD) a remedy typical of landfill closures, consisting of capping in the reservoir area and excavation of wastes from some areas outside the reservoir for consolidation with the wastes beneath the cap over the reservoir.

Figure 1: Waste Disposal, Inc., Santa Fe Springs, CA  
Site Overview - Location of Parcel 025



As of the present time, EPA has identified certain current owners or operators, former owners or operators who owned or operated the property at the time of waste disposal, former operators of WDI, and generators of wastes disposed of at the site. These parties are considered as potentially responsible parties (PRPs) under CERCLA. Under CERCLA, PRPs can be required to remediate any environmental and human health threats through response actions and to reimburse EPA for its costs in investigating and cleaning up the contaminated site. A group of PRPs known as the Waste Disposal Inc., Group (WDIG) initiated the remedial design work for this remedy in 1995 under an EPA enforcement order.

The 1993 ROD did not specifically address groundwater. Because uncertainties remained about the extent of groundwater and soil gas contamination, and because further environmental data were necessary for completion of the remedial design, EPA and the WDIG conducted further site investigations. EPA and the WDIG completed the majority of these additional investigations during the summer of 1998, and EPA is compiling data in order to re-evaluate the selected remedial action and to facilitate remedial design.

This Status of Environmental Investigations Report for Parcel 025 presents the findings from the various investigations of the WDI site conducted as of 1998 of concern to this specific parcel. Although data emphasis is placed on what is known for this Parcel, selected findings from adjacent parcels are also provided when appropriate. Attachment 1 contains a chronological chain of title for Parcel 025 through February 1997.

## **OVERVIEW OF ENVIRONMENTAL SAMPLING INVESTIGATIONS**

### **EPA 1988 Remedial Investigation**

In 1988, EPA conducted the first investigation of the WDI site under CERCLA. This investigation involved the collection of groundwater, soil, and soil gas samples at the site, however, no soil borings, groundwater monitoring wells, or soil vapor wells were installed on Parcel 25 during the RI.

### **1997-1998 EPA Soil Gas/Indoor Air Investigations**

During the summer of 1997, EPA collected and analyzed soil gas and indoor air samples at the WDI site, including Parcel 025. The purpose of these investigations was to evaluate the potential for migration of soil gas contaminants from the buried waste into the indoor air of the on-site buildings. In order to establish contaminant levels that could be used to determine the need for future site investigations, EPA developed interim threshold levels for chemicals found in soil gas on-site. If a chemical was found to exceed the interim threshold level, EPA determined the need for additional investigations such as indoor air monitoring or expansion of the soil gas monitoring well network. The interim threshold levels are presented in the tables in this report along with the analytical data for Parcel 025.

EPA developed the interim threshold levels based on certain assumptions and property uses at the site. For each chemical, EPA calculated a risk range and selected a concentration level that was within a one in

one million ( $10^{-6}$ ) or one in 100,000 ( $10^{-5}$ ) cancer risk, depending on the chemical. Exceedance of that concentration does not necessarily indicate an immediate risk. The levels are interim for the purposes of the site investigation, and may or may not be adopted as threshold levels for the final remedy. Because there are no buildings present on Parcel 025, no indoor air samples were collected at this parcel.

### **Temporary Probe Sampling Results**

Soil gas beneath Parcel 025 was sampled from five temporary soil gas probe locations (GP7, GP10, GP13, GP14, and GP126) as shown on Figure 2. The temporary probes were installed by hammering stainless-steel rods to a depth of about 10 ft and then attaching Teflon tubing to an adapter at the bottom of the rods. All but GP126 were also pushed to 20 feet for collection of samples from that depth. A portable vacuum pump was used to collect the samples for on-site analysis. Field instruments were also used to detect methane and volatile organic chemicals.

Table 1 presents the analytical results for the samples collected from these probes. Nine solvent and petroleum-related volatile organic chemicals were detected in these samples. Concentrations of volatile organic compounds ranged from 54 to 1,100 part per billion by volume (ppbv); benzene and vinyl chloride were the only volatile organic chemicals that exceeded their interim threshold levels of 100 ppbv and 12.5 ppbv, respectively. Benzene exceeded its threshold level in the 10- and 20-ft probes at GP07 and vinyl chloride exceeded its threshold level in the 20-ft probe at GP14. The threshold level for methane (1.25%) was exceeded in the sample collected from 10 feet in GP07 (39.1%), in the sample collected from 20 feet in GP10 (3.2%), and in both the 10- and 20-foot samples collected from GP13 (21.7% and 1.8%, respectively).

### **WDIG Remedial Design Investigative Activities 1997-1998**

During the fall of 1997 and spring and summer of 1998, the WDIG conducted a number of studies at the WDI site. These studies included the installation of soil vapor wells, the drilling of soil borings for soil and waste characterization, the evaluation of the soil vapor extraction technology for its effectiveness at the site, and the study of liquids removal effectiveness. As part of its efforts to estimate the extent of the buried waste mass that surrounds the reservoir, WDIG drilled 153 push probe soil borings throughout the site. Seven of these borings (TS-9, TS-10, TS-11, TS-12, TS-20, TS-97, and TS-98) were drilled within Parcel 25. The locations of these borings are shown on Figure 2. WDIG visually observed the soil collected from these borings to estimate the extent of buried waste beneath Parcel 025. The WDIG observed buried waste approximately 5 ft below ground surface in borings TS-9 (8 ft thick), TS-10 (17 ft thick), TS-11 (19 ft thick), and TS-98 (less than 1 ft thick). No waste was observed in TS-12, TS-20 or TS-97. Soil borings logs for these borings are provided in Attachment 1.



**Figure 2: Location of Sampling Points for Parcel 025**

**Waste Disposal, Inc.  
Superfund Site  
Santa Fe Springs,  
California**

**Parcel  
8167-002-025**

**LEGEND**

⊙ Soil Borings (TS)  
1997/1998 WDIG  
Soil Boring

○ GeoProbe Locations

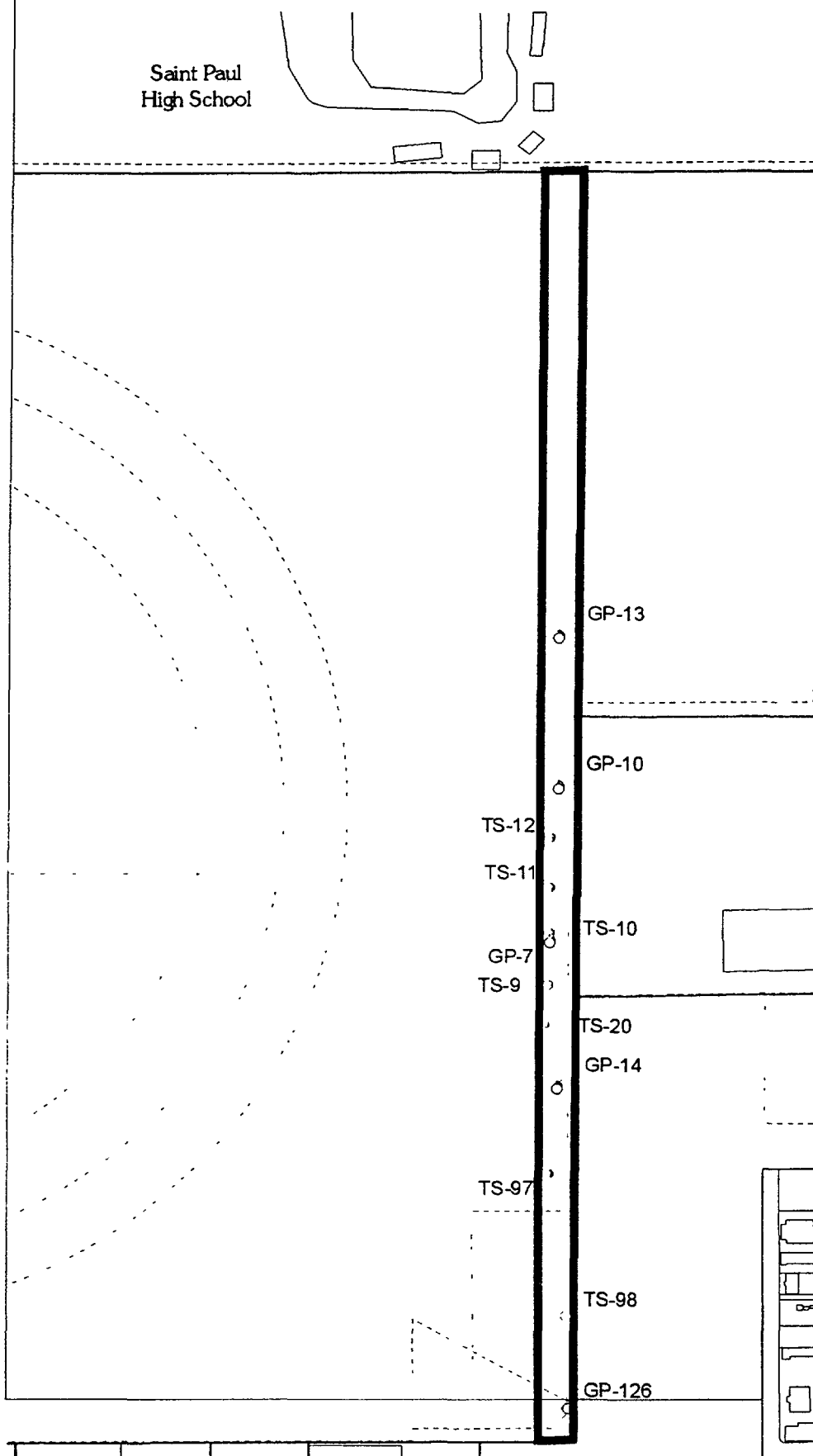
— Buildings

- - - Fences

— Parcel Boundaries

**— Parcel 025 Boundary**

- - - Edge of buried  
Reservoir



**TABLE 1: SOIL GAS GEOPROBE RESULTS FOR PARCEL 025**

Sample Location	Interim Soil Gas Threshold Level	GP-07	GP-07	GP-10	GP-10	GP-13
Sample Date		Aug-97	Aug-97	Aug-97	Aug-97	Aug-97
Sample Depth (ft)		10	20	10	20	10
Analytical Parameter	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
1,1-Dichloroethane	12,800	ND	ND	ND	--	--
1,2-Dichloroethane	180	ND	ND	ND	--	--
Benzene	100	250	920	ND	--	--
Chloromethane	NE	1,100	ND	ND	--	--
cis-1,2-Dichloroethene	930	130	ND	ND	--	--
Ethylbenzene	24,500	ND	85	470	--	--
m- & p-Xylenes	7,140	ND	170	150	--	--
Toluene	10,600	ND	97	ND	--	--
Vinyl Chloride	12.5	ND	ND	ND	--	--
Methane (field) % by volume	1.25%	39.1	0.3	0.3	0.3	21.7

Sample Location	Interim Soil Gas Threshold Level	GP-13	GP-14	GP-14	GP-126
Sample Date		Aug-97	Aug-97	Aug-97	Aug-97
Sample Depth (ft)		20	10	20	10
Analytical Parameter	ppbv	ppbv	ppbv	ppbv	ppbv
1,1-Dichloroethane	12,800	--	ND	280	--
1,2-Dichloroethane	180	--	ND	54	--
Benzene	100	--	ND	ND	--
Chloromethane	NE	--	ND	ND	--
cis-1,2-Dichloroethene	930	--	ND	240	--
Ethylbenzene	24,500	--	ND	ND	--
m- & p-Xylenes	7,140	--	ND	ND	--
Toluene	10,600	--	ND	ND	--
Vinyl Chloride	12.5	--	ND	520	--
Methane (field) % by volume	1.25%	1.8	0.1	0.9	0.0

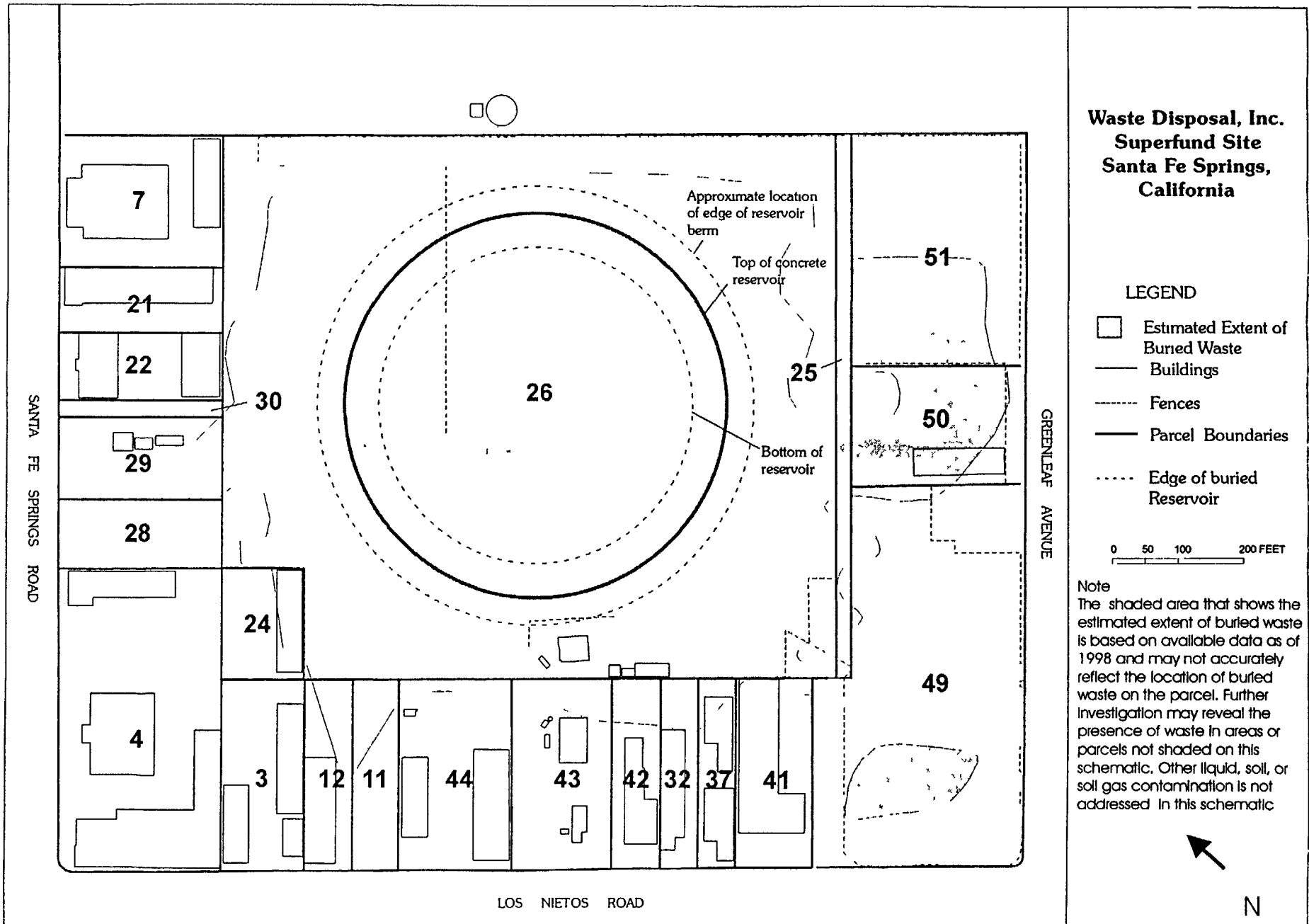
ppbv = parts per billion by volume; ND = not detected; NE= None Established

**SUMMARY OF ENVIRONMENTAL SAMPLING RESULTS FOR APN 8167-002-025**

Soil borings drilled and wells installed on Parcel 025 and adjacent parcels were used by EPA in estimating the extent of soil and groundwater contamination for the site overall. The approximate extent of the buried waste that surrounds the reservoir area, as shown on Figure 3, is based on the results of the 1988 investigation and the 1997-1998 site investigations.

Site investigations performed in 1988-1989, 1997 and 1998 have evaluated the soil and soil gas associated with Parcel 025. Visual observation of the soil collected within Parcel 025 indicates that buried waste up to 19 ft thick underlies a portion of the parcel. This buried waste appears to be contiguous with the waste mass that surrounds the buried reservoir. Soil gas results for this parcel indicate that the same petroleum- and solvent-related chemicals found in the buried waste throughout the site are also found beneath Parcel 025 indicating the possibility of chemical disposal at this parcel.

Figure 3: Waste Disposal, Inc., Santa Fe Springs, CA  
Estimated Extent of Buried Waste



**BIBLIOGRAPHY OF SELECTED WDI SITE DOCUMENTS**

- CDM Federal Programs Corporation (CDM Federal), 1997. Subsurface Gas Contingency Plan, Waste Disposal, Inc. Superfund Site, Santa Fe Springs, California. July 1997.
- CDM Federal, 1999a. Groundwater Data Evaluation Report, Waste Disposal, Inc. Superfund Site, Santa Fe Springs, California. January 14, 1999.
- CDM Federal, 1999d. Subsurface Gas Contingency Plan Investigation Report Addendum, July 1998 Vapor Well Installation and Sampling Results, Waste Disposal, Inc. Superfund Site, Santa Fe Springs, California. January 14, 1999.
- CDM Federal, 1999e. Subsurface Gas Contingency Plan Investigation Report, Waste Disposal, Inc. Superfund Site, Santa Fe Springs, California. January 18, 1999.
- CDM Federal, 1999f. Subsurface Gas and In-Building Air Sampling Evaluation Report, Waste Disposal, Inc. Superfund Site, Santa Fe Springs, California. September 15, 1999.
- Dames and Moore, 1984. Summary of Findings Preliminary Site Characterization, Waste Disposal, Inc., for Redevelopment Agency, City of Santa Fe Springs, California. December 7, 1984.
- Dames and Moore, 1985. Summary of Findings Phase II Investigation, Waste Disposal, Inc. Site, for Redevelopment Agency, City of Santa Fe Springs, California. March 14, 1985.
- Dames and Moore, 1986a. Report Cone Penetrometer Survey, Shallow Vapor Survey, Campbell Property, Greenleaf Avenue and Los Nietos Road, Santa Fe Springs, California. August 14, 1986.
- Dames and Moore, 1986b. Draft Report Floor Sampling Survey, Shallow Soil Vapor Survey, Toxo Spray-Dust, Inc. Site, Santa Fe Springs, California. August 19, 1986.
- Dames and Moore, 1986c. Draft Summary of Findings Field Investigation, Campbell Property, Greenleaf Avenue and Los Nietos, Santa Fe Springs, California. August 19, 1986.
- Dames and Moore, 1986d. Report for Soil Sampling Program, Toxo Spray-Dust, Waste Disposal, Inc. Site, Santa Fe Springs, California. November 5, 1986.
- EBASCO Services, Inc. (EBASCO), 1989a. Final Soil Characterization Report, Waste Disposal, Inc., Santa Fe Springs, California. May 1989.
- EBASCO, 1989a. Final Ground Water Characterization Report, Waste Disposal, Inc., Santa Fe Springs, California. May 1989.
- EBASCO, 1989b. Final Subsurface Gas Characterization Report, Waste Disposal Inc., Santa Fe Springs, California. May 1989.
- EBASCO, 1989c. Final Remedial Investigation Report, Waste Disposal, Inc., Santa Fe Springs, California. Volumes 1 and 2, November 1989.

Frey Environmental, Inc., 1996a. Subsurface Combustible Gas Investigation for Property Located at 9843 Greenleaf Avenue, Santa Fe Springs, California. January 15, 1996.

Frey Environmental, Inc., 1996b. Quarterly Subsurface Combustible Gas Monitoring Results for Property Located at 9843 Greenleaf Avenue, Santa Fe Springs, California. April 11, 1996.

Frey Environmental, Inc., 1996c. Quarterly Subsurface Combustible Gas Monitoring Results for Property Located at 9843 Greenleaf Avenue, Santa Fe Springs, California. July 11, 1996.

Frey Environmental, Inc., 1997. Quarterly Subsurface Combustible Gas Monitoring Results for Property Located at 9843 Greenleaf Avenue, Santa Fe Springs, California. February 19, 1997.

Hammond Soils Engineering, 1975. Fill Investigation, and Preliminary Soils Study, Proposed Industrial Building Located at 12707 East Los Nietos Road, Santa Fe Springs, California. August 4, 1975.

Hunter, J.L., President, John L. Hunter and Associates, Inc., 1998. Letter to Richard Gillespy. Los Angeles County Department of Health Services regarding soil sampling at the Campbell Property, corner of Greenleaf Avenue and Los Nietos Road, Santa Fe Springs. January 15, 1998.

Targhee, Inc., 1996. Remedial Action Report, 12631 Los Nietos Road, Santa Fe Springs, California. January 23, 1996.

TRC Environmental Solutions, Inc. (TRC), 1995. Predesign and Intermediate (60%) Design Report, Soils and Subsurface Gas Remedial Design, Waste Disposal, Inc. Superfund Site, Santa Fe Springs, California. October 1995.

TRC, 1997b. Comprehensive Subsurface Gas Quarterly Monitoring Plan, Waste Disposal, Inc. Superfund Site, Santa Fe Springs, California. July 1997

TRC, 1998b. Preliminary Site Characterization Report, Waste Disposal, Inc. Superfund Site. March.

TRC, 1998c. Technical Memorandum No. 9A - Soil Vapor Extraction Testing (Rev. 2.0), Waste Disposal, Inc. Superfund Site. April 14, 1998.

TRC, 1998e. Technical Memorandum No. 10 - Additional Soil Sampling for Leachability Testing, Report of Findings. Waste Disposal, Inc. Superfund Site. October 1998.

TRC, 1998f. Revised Site Biological Endangerment Assessment, Waste Disposal, Inc. Superfund Site. October 28, 1998.

TRC, 1999a. 1998 Annual Soil Gas Monitoring Report, Waste Disposal, Inc. Superfund Site. March.

TRC, 1999b. 1998 Annual In-Business Air Monitoring Report, Waste Disposal, Inc. Superfund Site. March.

TRC, 1999c. 1998 Annual Ground Water Monitoring Report, Waste Disposal, Inc. Superfund Site. March.

- TRC, 1999d. Technical Memorandum No. 9A - Soil Vapor Extraction Testing, Report of Findings, Waste Disposal, Inc. Superfund Site. March 1999.
- TRC, 1999f. Remedial Design Investigative Activities Report, Waste Disposal, Inc. Superfund Site. August 16, 1999.
- U.S. Environmental Protection Agency (USEPA), 1988. Aerial Photographic Analysis of Waste Disposal, Inc., Whittier, California. March 1988.
- USEPA, 1989. Final Endangerment Assessment, Waste Disposal, Inc. Site, Santa Fe Springs, California. November 1989.
- USEPA, 1993a. Superfund 1992 Groundwater Monitoring Report, Waste Disposal, Inc. Site, Santa Fe Springs, California. January 1993.
- USEPA, 1993b. Feasibility Study Report for Soils and Subsurface Gas, Waste Disposal, Inc. Superfund Site, Santa Fe Springs, California. August 2, 1993.
- USEPA, 1993c. Record of Decision - Soil and Subsurface Gas Operable Unit, Waste Disposal, Inc. Superfund Site, Santa Fe Springs, California. December 22, 1993.
- USEPA, 1993e. Administrative Order for Remedial Design - Docket No. 94-17, Waste Disposal, Inc. Superfund Site, Santa Fe Springs, California. December 27, 1993.
- USEPA, 1997a. Attachment 2- Amended Scope of Work for Remedial Design. Waste Disposal, Inc. Superfund Site Soil and Subsurface Gas Operable Unit, Santa Fe Springs, California. March 1997.
- USEPA, 1997b. Docket No. 97-09 - Amended Administrative Order for Remedial Design and Other Response Actions (amending Docket No. 94-17), Waste Disposal, Inc. Superfund Site, Santa Fe Springs, California. 1997.
- USEPA, Environmental Response Team Center, 1998a. Area 7 Geoprobe Characterization Report, Waste Disposal, Inc. Site, Santa Fe Springs, California. December 1998.
- USEPA, Environmental Response Team Center, 1998b. Location of Septic Tanks, Dry Wells, and Trenched Areas, Waste Disposal, Inc. Site, Santa Fe Springs, California. Status Report, December 1998.
- USEPA, Environmental Response Team Center, 1999a. Reservoir Characterization Report, Volume I (Physical Characterization) and Volume II (Chemical Characterization), Waste Disposal, Inc. Site, Santa Fe Springs, California. January 15, 1999.

## ATTACHMENTS



**ATTACHMENT 1**

**Historic Ownership Chain of Title**

**ATTACHMENT 1  
CHAIN OF TITLE  
THROUGH February 5, 1997  
WASTE DISPOSAL, INC, APN 8167-002-025**

No. 1

01-15-21

Book 134 Page 213 of Official Records

James Weaver, et al.

Brenton S. Carr

Granted oil leasehold

No. 2

06-15-21

Book 332 Page 140 of Official Records

Brenton S. Carr / Huntington Owners Oil Co.

James Weaver, et al.

Surrendered oil leasehold

No. 3

11-26-21

Book 587 Page 368 of Official Records

Pacific Land Improvement Co.

Chanslor-Canfield Midway Oil Co.

Grant deed

No. 4

01-22-32

Book 11335 Page 264 of Official Records

Chanslor-Canfield Midway Oil Co.

General Petroleum Corp. of CA

Grant deed to real property, oil rights reserved by seller

No. 5

03-01-40

Book 17327 Page 128 of Official Records

General Petroleum Corp. of CA

Public record

Notice of non-responsibility

No. 6

02-02-42

Book 19044 Page 385 of Official Records

General Petroleum Corp. of CA

Ford Alexander Corp.

Deed to real property, oil rights reserved by Chanslor-Canfield

No. 7

02-26-46

Book 22789 Page 395 of Official Records

Ford Alexander Corp.

Public record

Notice of completion of work

No. 8  
10-21-47  
Book 25500 Page 167 of Official Records  
Ford Alexander Corp.  
N. B. Hudson  
Grant deed to real property, oil rights reserved by Chanslor-Canfield

No. 9  
10-21-47  
Book 25500 Page 169 of Official Records  
N.B. Hudson  
F. Caneer, D. L. Carter, Marvin Pitts, an undivided 1/4 interest each  
Grant deed

No. 10  
10-05-51  
Book 37358 Page 244 of Official Records  
Chanslor-Canfield Midway Oil Co.  
Atlantic Oil Co.  
Leased oil & gas rights

No. 11  
10-05-51  
Book 37361 Page 362 of Official Records  
Chanslor-Canfield Midway Oil Co.  
Public record  
Notice of non-responsibility

No. 12  
06-15-53  
Book 41974 Page 191 of Official Records  
Morton and Dolley, a partnership: Harold C. Morton, Dorothy F. Morton, Chester F. Dolley  
California Bank, as beneficiary; California Trust Co., as trustee  
Deed of trust on oil lease interest

No. 13  
04-05-55  
Book 47409 Page 100 of Official Records  
N. B. Hudson  
N. B. Hudson and Bessie Hudson  
Grant deed, joint tenancy as to an undivided 1/4 interest

No. 14  
09-14-56 (Doc. date)  
Book 41974 Page 191 of Official Records  
Morton and Dolley, a partnership: Harold C. Morton, Dorothy F. Morton, Chester F. Dolley  
California Bank, as beneficiary and trustee  
Deed of trust

No. 15

10-17-56

Instrument No. 3824

Whittier Area Disposal or D. L. Carter, N. B. Hudson, M. Pitts, F. Caneer

Public record

Notice of non-responsibility

No. 16

04-05-60

Instrument No. 1677

N. B. Hudson, Bessie Hudson

D. L. Carter, Zelda Carter

Grant deed

No. 17

04-05-60

Instrument No. 1678

D. L. Carter, Zelda Maye Carter

N. B. Hudson, Bessie Hudson, as beneficiaries; Security First National Bank, as trustee

Deed of trust

No. 18

07-15-60

Instrument No. 4314

Security First National Bank, as trustee

Persons entitled

Full reconveyance

Includes 24, 25, 26, 2 easements; affects Doc. No. 17

No. 19

10-13-60

Instrument No. 4813

D. L. Carter, Zelda Carter

Marvin Pitts, Cecilia Pitts, as joint tenants

Grant deed to an undivided 1/12 interest

No. 20

10-13-60

Instrument No. 4814

D. L. Carter, Zelda Carter

Fernando Caneer, Wanda Caneer, as joint tenants

Grant deed to an undivided 1/12 interest

No. 21

11-08-63

Instrument No. 4882

Morton and Dolley, a partnership: Harold C. Morton, Dorothy F. Morton, Chester F. Dolley, Anna M. Dolley

United California Bank, as beneficiary and trustee

Deed of trust

No. 22  
02-16-65  
Instrument No. 5962  
United California Bank, as trustee  
Persons entitled  
Full reconveyance  
Affects Doc. No. 12

No. 23  
02-16-65  
Instrument No. 5963  
United California Bank, as trustee  
Persons entitled  
Full reconveyance  
Affects Doc. No. 14

No. 24  
05-23-66  
Instrument No. 2391  
Nollie B. Hudson, Bessie Hudson, Delmer L. Carter, Zelda Carter  
Fernando Caneer, Wanda Caneer, Marvin W. Pitts, Cecilia Pitts  
Grant deed

No. 25  
05-23-69  
Instrument No. 2917  
Mobil Oil Co.  
Public record  
Unit Agreement

No. 26  
05-23-69  
Instrument No. 2918  
Mobil Oil Co.  
Public record  
Exhibits to the Unit Agreement

No. 27  
08-25-69  
Instrument No. 2535  
United California Bank  
Security Pacific Bank  
Assignment & substitution of trustee

No. 28  
01-21-70  
Instrument No. 3004  
F. Caneer  
John Caneer, Joseph Caneer  
Quitclaim deed

No. 29  
01-21-70  
Instrument No. 3005  
F. Caneer  
John Caneer, Joseph Caneer  
Quitclaim deed

No. 30  
12-28-70  
Instrument No. 1146  
Mobil Oil Co.  
Public record  
Certificate that Unit Agreement will become effective

No. 31  
01-26-71  
Instrument No. 1631  
Mobil Oil Co.  
Public record  
Counterpart C of Unit Agreement

No. 32  
02-18-71  
Instrument No. 3068  
Chanslor-Western Oil and Development Co.  
Public record  
Agreement to become a party to unit agreement

No. 33  
08-17-71  
Instrument No. 3195  
Bell Petroleum Co., Roland A. Way, Ethel Eckels  
Public record  
Agreement to become a party to unit agreement

No. 34  
11-22-71  
Instrument No. 3911  
Estate of Wanda Caneer  
Joseph Caneer, John Caneer  
Order for final estate distribution

No. 35  
08-21-72  
Instrument No. 3990  
Rodman Palmer  
Public record  
Agreement to become a party to unit agreement

No. 36  
09-19-72  
Instrument No. 3644  
John Caneer, Joseph Caneer, Estate of Fernando Caneer  
Internal Revenue Service, as beneficiary; Title Insurance and Trust Co., as trustee  
Deed of trust

No. 37  
07-14-73  
Instrument No. 704  
Title Insurance and Trust Co., trustee  
Persons entitled  
Full reconveyance  
Affects Doc. No. 35

No. 38  
12-20-73  
Instrument No. 3425  
Catherine Yrisarri  
Public record  
Agreement to become a party to unit agreement

No. 39  
12-31-73  
Instrument No. 399  
N. B. Hudson, Bessie Hudson  
Phil Campbell, Gwen H. Campbell  
Grant Deed

No. 40  
12-31-73  
Instrument No. 400  
Delmer L. Carter, Zelda Maye Carter  
Phil Campbell, Gwen H. Campbell  
Grant deed

No. 41  
12-31-73  
Instrument No. 401  
Phil Campbell, Gwen Campbell  
N. B. Hudson, Bessie Hudson, beneficiaries; Security Pacific National Bank, trustee  
Deed of trust

No. 42  
12-31-73  
Instrument No. 402  
Phil Campbell, Gwen Campbell  
Delmer Carter, Zelda Carter, beneficiaries; Security Pacific National Bank, trustee  
Deed of Trust

No. 43  
03-22-74  
Instrument No. 3808  
Mobil Oil Co.  
Public record  
First revision of exhibit B of unit agreement

No. 44  
04-15-74  
Instrument No. 2865  
Mobil Oil Co.  
Public record  
Second revision of exhibit B of unit agreement

No. 45  
05-17-74  
Instrument No. 4331  
Marvin W. Pitts, Cecilia Pitts  
Marvin E. Pitts  
Grant deed

No. 46  
05-17-74  
Instrument No. 4332  
Marvin E. Pitts  
Marvin W. Pitts, Cecilia Pitts, beneficiaries; Lawyers Title Insurance Corp., trustee  
Deed of trust

No. 47  
07-29-75  
Instrument No. 335  
Delmer L. Carter, Zelda Carter  
Phil Campbell, Gwen Campbell  
Agreement modifying note secured by deed of trust

No. 48  
07-29-75  
Instrument No. 336  
Phil Campbell, Gwen Campbell  
N.B. Hudson, Bessie Hudson, Delmer Carter, Zelda Carter, beneficiaries; Security Pacific National Bank, as trustee  
Deed of trust

No. 49  
10-20-76  
Instrument No. 4482  
Joseph Caneer  
Phil Campbell, Gwen H. Campbell, Marvin E. Pitts, John Caneer, Security Pacific National Bank, Nollie B. Hudson, Bessie Hudson, Delmer L. Carter, Zelda M. Carter, Lawyers Title Insurance Corp., Cecilia Pitts  
Notice of Lis Pendens



No. 50  
12-30-77  
Instrument No. 77-1448130  
Joseph Caneer, John Caneer, Lucy Caneer, La Rea Caneer  
Business Properties Partnership No. 26, a general partnership  
Grant deed

No. 51  
12-30-77  
Instrument No. 77-1448131  
Business Properties Partnership No. 26, a general partnership  
Adeline R. Bennett, M.D.  
Quitclaim deed

No. 52  
09-24-79  
Instrument No. 79-1060572  
Marvin E. Pitts  
Marvin W. Pitts, Cecilia Pitts  
Quitclaim deed

No. 53  
10-26-79  
Instrument No. 79-1205069  
Marvin E. Pitts  
Marvin W. Pitts, Cecilia Pitts  
Quitclaim deed

No. 54  
06-18-80  
Instrument No. 80-589720  
Delmer Carter, beneficiary  
Security Pacific National Bank, trustee  
Assignment of deed of trust executed by Phil Campbell and Gwen Campbell

No. 55  
06-18-80  
Instrument No. 80-589722  
Delmer Carter, beneficiary  
Security Pacific National Bank, trustee  
Assignment of deed of trust executed by Phil Campbell and Gwen Campbell

No. 56  
01-18-82  
Instrument No. 82-57860  
Marvin W. Pitts, Cecilia Pitts, Adeline R. Bennett  
City of Santa Fe Springs  
Covenant and agreement to hold property as one parcel

No. 57  
02-26-82  
Instrument No. 82-207630  
Joseph Caneer, Lucy Caneer, John Caneer, La Rea Caneer  
Phil Campbell, Gwen Campbell  
Easement

No. 58  
06-07-82  
Instrument No. 82-574192  
Marvin W. Pitts, Cecilia Pitts, beneficiaries and substituted trustees  
Lawyers Title Insurance Corp., original trustee, and persons entitled  
Substitution of trustee and full reconveyance  
Affects Doc. No. 45

No. 59  
08-31-82  
Instrument No. 82-886182  
Security Pacific National Bank, trustee  
Persons entitled  
Full reconveyance  
Deed of trust recorded 7-29-75; affects Doc. No. 47

No. 60  
05-03-83  
Instrument No. 83-493853  
Marvin W. Pitts, Cecilia Pitts  
Pitts Family Trust  
Quitclaim deed

No. 61  
05-03-83  
Instrument No. 83-493854  
Marvin W. Pitts, Cecilia Pitts  
Pitts Family Trust  
Quitclaim deed

No. 62  
05-02-89  
Instrument No. 89-697295  
Adeline R. Bennett  
Adeline R. Bennett Trust  
Grant deed

No. 63  
07-19-91  
Instrument No. 91-1112254  
Atlantic Oil Co.  
Chanslor-Canfield Midway Oil Co.  
Quitclaim of oil and gas lease

No. 64

12-29-94

Instrument No. 94-2287419

Bank of America, N.T. & S.A., Trustee of the Testamentary Trust of Delmer Carter

Public record

Notice of intent to preserve interest

No. 65

02-07-96

Instrument No. 96-218798

County of Los Angeles

Adeline R. Bennett Trust

Notice that weeds on property are a public nuisance

**ATTACHMENT 2**

**Soil Boring Logs**

DEPTH IN FEET	PID OR FID (ppm)	PENETRATION-RESISTANCE (BLOWS PER FOOT) <small>(12 COURSE)</small>	SAMPLE NO. AND TYPE (12 COURSE)	U.S.C.S.	PROFILE/ LITHOLOGY	BORING NO. <u>WD7-TS-09</u>		SHEET <u>1</u> OF <u>1</u>	
						DRILLING CO./RIG <u>TEG</u>	COORDINATES	N <u>NM</u>	E <u>NM</u>
						SAMPLER TYPE <u>Continuous Core</u>	DATE BEGAN <u>10-7-97</u>		
						AND DIMENSION <u>1" x 2"</u>	DATE FINISHED <u>10-7-97</u>		
						FIELD ENGINEER <u>A. Isaly</u>			
						EDITED BY <u>A. Isaly</u>			
						CHECKED BY _____	GROUND SURFACE EL. <u>NM</u>		
DESCRIPTION									
0	NA	1430	CC			(1'-2') SANDY SILT TO SILTY SAND: Light brown, trace of gravel (1'-1.2'), trace of coarse grained sand, well graded, dry, No odor, No staining.			
5		1435	1.2' rec	ml/sm		(2.10'-4') Increase in sand content, well graded, intermixed with red and white material, dry, No odor, No staining.			
		1440	1.1' rec			(4.11'-5.1') Similar material as 2.10'-4' core. (5.1'-6') Silty Clay to Clayey Silt: Dark brown, trace of coarse sand and gravel, micaceous, slightly moist, Strong hydrocarbon odor, possibly stained.			
		1445	1.1' rec			(6.11'-7.1') Black silty clay intermixed with fine to med. grained Red to brown sand (7.1'-8') Silty Clay to Clay Silt: Black, trace of sand, intermixed with light gray sand deposits, Strong hydrocarbon odor, stained.			
10		1450	1' rec			(8.11'-9.1') Black to olive green, saturated, strong odor, stained.			
		1455	1.1' rec	cl/ml		(10.11'-12') Similar material as 9'-10' core. Stained.			
15		1500	1.1' rec			(12.8'-14') Similar material as 11'-12' core. Stained.			
		1505	2' rec			(14'-16') Dark brown to olive green, trace of fine grained sand, slightly moist, slight odor, possibly stained.			
		1510	1.6' rec			(16.6'-18') Brown, similar material as 14'-16' core, No odor, does not appear stained.			
20		1515	1.6' rec	my/sm		(18.6'-20') SILTY SAND TO SANDY SILT: Olive green, trace of coarse sand, well graded, micaceous, slightly moist, No odor, does not appear stained.			
		1520	1.1' rec	ml		(20.1'-20.9') Similar material as 18.6'-20' core (20.9'-22') SILT: Light gray, trace of fine grained sand, poorly graded, micaceous, slightly moist, No odor, No staining.			
25									

Total Depth: 22 FEET

Ground water was not encountered during drilling

Backfilled with bentonite pellets.

Contacted possible slump material at ~6' to 14'.

NM - not measured  
NA - Not Applicable  
CC - Continuous Core

A-FIELD/FMB REV. 03/20/92

CLIENT EPA

(ALL FIELD LOGGING ON THIS FORM, ORIGINAL TO PROJECT FILES)

PROJECT NO. 94-256

ENVIRONMENTAL SOLUTIONS, INC.

DEPTH IN FEET	PID OR FID (ppm)	PENETRATION RESISTANCE (BLOWS PER FOOT) <i>1500-1550</i>	SAMPLE NO. AND TYPE (Recovery)	U.S.C.S.	PROFILE/ LITHOLOGY	BORING NO. <u>WAT-7540</u>		SHEET <u>1</u> OF <u>1</u>	
						DRILLING CO./RIG <u>TEG</u>	COORDINATES	N <u>NW</u>	E <u>NM</u>
						SAMPLER TYPE <u>CONTINUOUS CORE</u>	DATE BEGAN <u>10-7-97</u>		
						AND DIMENSION <u>1" x 2"</u>	DATE FINISHED <u>10-7-97</u>		
						FIELD ENGINEER <u>A. Isaly</u>			
						EDITED BY <u>A. Isaly</u>			
						CHECKED BY _____	GROUND SURFACE EL. <u>NM</u>		
DESCRIPTION									
0	NA	1550	10'uc ml/sm			(1.2'-2') SILTY SAND TO SANDY SILT: Light brown, trace of coarse sand, higher silt content (1.2'-1.6'), trace of vegetation, well graded, dry, No odor, No staining			
5		1600	6'uc ml/sm			(2.6'-2.9') Silty clay to clayey silt; Dark brown, trace of coarse sand, micaceous, slightly moist, No odor, No staining			
		1630	1.4'uc			(2.9'-3.0') Silty sand to sandy silt; Brown, trace of coarse sand, well graded, slightly moist, No staining (3'-3.4') Silt; Red, poorly graded (3.4'-4') Silty sand to sandy silt; Brown to red, trace of coarse sand, intermixed with fine grained light brown sand, slightly moist, No odor, No staining			
10		1635	1.6'uc			(5.6'-6') Similar material as 3.4'-4' core. No odor, No staining			
		1640	1.3'uc			* [Rock in site of sampler. Relocated boring 42.5' north of original] *			
15		1645	1.6'uc			(6.8'-7') Silty clay to clayey silt; White, trace of sand, slightly moist, black material intermixed, strong hydrocarbon odor, stained (7'-8') Similar material as 6.3'-7' core.			
		1650	2'uc	cl/ml		Black to dark brown, hydrocarbon stained, strong odor.			
		1655	1.9'uc			(8.7'-10') Olive green, increase in hydrocarbon staining (9.5' to 10') Strong odor			
20		1700	2'uc			(10.9'-12') Similar material as 3.7'-10' core. Decrease in hydrocarbon staining, strong odor			
		1705	2'uc			(12.6'-14') Similar material as 10.4'-12' core. Strong hydrocarbon odor. Possibly stained (No evidence of hydrocarbon staining)			
		1725	2'uc			(14'-16') Similar material as 12.6'-14' core. Evidence of hydrocarbon staining at 15.7'.			
25		1735	1.4'uc	Sp		(16.3'-18') Similar material as 14'-16' core. Hydrocarbon staining throughout core.			
						(18'-20') Similar material as 16.3'-18' core. Hydrocarbon staining throughout core.			
						(20'-22') Similar material as 18'-20' core. Core appears to be very stained. (large volume of hydrocarbon)			
						(22'-23.9') Similar material as 20'-22' core. (23.9'-24') Sand; Olive green, fine to med. grained, poorly graded, slightly moist, strong hydrocarbon odor, possibly stained.			
						(24.8'-26') Similar material as 23.9'-24' core. Fine grained, slight odor, No staining			
<p>TOTAL DEPTH: 26 FEET</p> <p>Ground Water was Not encountered during drilling</p> <p>Backfilled both borings (6' &amp; 26') with bentonite pellets</p> <p>Sump material appears to be from 6.8' to 23.9'</p> <p>NM - Not measured</p> <p>NA - Not Applicable</p> <p>CC - Continuous Core</p>									

CLIENT EPA

PROJECT NO. 94-256

CC - Continuous Core

(ALL FIELD LOGGING ON THIS FORM, ORIGINAL TO PROJECT FILES)

A-FIELD/FMB REV. 03/20/92

ENVIRONMENTAL SOLUTIONS, INC.

DEPTH IN FEET	PID OR FID (ppm)	PENETRATION RESISTANCE (BLOWS PER FOOT)	SAMPLE NO. AND TYPE (RECOVERY)	U.S.C.S.	PROFILE/ LITHOLOGY	BORING NO. <u>WDT-TS-11</u>		SHEET <u>1</u> OF <u>1</u>	
						DRILLING CO/RIG <u>TEG</u>	COORDINATES <u>N</u> <u>NM</u> <u>E</u> <u>NM</u>		
						SAMPLER TYPE <u>Continuous Core</u>		DATE BEGAN <u>10-8-97</u>	
						AND DIMENSION <u>1" x 2"</u>		DATE FINISHED <u>10-8-97</u>	
						FIELD ENGINEER <u>A. Isaly</u>		GROUND SURFACE EL <u>NM</u>	
						EDITED BY <u>A. Isaly</u>			
						CHECKED BY _____			
DESCRIPTION									
0	NA	0650	CC 0"	m/sm		(1.4'-1.6') SILTY SAND TO SANDY SILT, BROWN, trace of gravel, trace of vegetation, well graded, dry, No staining (1.6'-2') Light brown, increase in fines, No odor, No staining.			
5		0655	1.7' sec.			(2.6'-2.10') BROWN, No odor, No staining (2.10'-4') BROWN to Light brown, trace of gravel, No odor, No staining			
10		0700	1.3' sec.			(4.9'-5.3') Similar material as 2.10'-4' core. (5.3'-6') Silty Clay to Clay Silt. Dark brown to black, saturated, strong hydrocarbon odor, stained			
15		0705	1.5' sec.			(6.7'-7.4') Similar material as 5.3'-6' core. (7.4'-8') Olive green to black, saturated, strong hydrocarbon odor, stained			
20		0710	1.3' sec.			(8.9'-10') Similar material as 7.4'-8' core. Strong odor, stained			
25		0715	1.3' sec.			(10.9'-12') Similar material as 8.9'-10' core. Decrease in black material content, stained.			
		0720	1' sec.			(13'-14') Similar material 8.9'-10' core. Decrease in black material content. Slight hydrocarbon odor, possibly stained			
		0725	1.6' sec.	cl/ml		(14.6'-16') Similar material as 13'-14' core. Slight increase in black material (15.5'-16') possibly stained			
		0730	2' sec.			(16'-18') Similar material as 14.6'-16' core. Brown hydrocarbon staining (17.9'-18')			
		0735	2' sec.			(18'-20') Similar material as 16'-18' core. Hydrocarbon staining throughout core. Trace of gravel at 19.1'			
		0740	1.6' sec.			(20.6'-22') Similar material as 18'-20' core. Decrease in hydrocarbon staining.			
		0745	2' sec.			(22'-23.9') Similar material as 20.6'-22' core. Increase in hydrocarbon staining (23.9'-24') Sand, olive green, fine grained, trace of silt, black material intermixed, poorly graded, slightly moist, strong hydrocarbon odor, possibly stained.			
		0750	1.7' sec.	SP ml		(24.5'-26') SILT, Olive green, fine grained, micaceous, slightly moist, No odor, does not appear to be stained			
<p>Total Depth: 26 feet</p> <p>Ground water was not encountered during drilling.</p> <p>Backfilled with bentonite pellets</p> <p>Sump material appears to be from ~5.3' to 23.9'</p> <p>NM - Not measured</p> <p>NA - Not Applicable</p> <p>CC - Continuous Core</p>									

A-FIELD/FMB REV. 03/20/92

CLIENT EPA

(ALL FIELD LOGGING ON THIS FORM, ORIGINAL TO PROJECT FILES)

PROJECT NO. 94-256

ENVIRONMENTAL SOLUTIONS, INC.

DEPTH IN FEET	PID OR FID (ppm)	PENETRATION-RESISTANCE (BLOWS PER FOOT)	SAMPLE NO. AND TYPE (CONTINUOUS)	U.S.C.S.	PROFILE/ LITHOLOGY	BORING NO. <u>W01-TS-12</u>		SHEET <u>1</u> OF <u>1</u>	
						DRILLING CO./RIG <u>TEG</u>	COORDINATES	N <u>NW</u>	E <u>NW</u>
						SAMPLER TYPE <u>Continuous Core</u>		DATE BEGAN <u>10-8-97</u>	
						AND DIMENSION <u>1" 12"</u>		DATE FINISHED <u>10-8-97</u>	
						FIELD ENGINEER <u>D. Isely</u>		GROUND SURFACE EL. <u>NM</u>	
						EDITED BY <u>A. Isely</u>			
						CHECKED BY _____			
DESCRIPTION									
0	NA		CC			(1.2'-1.6') Silty Sand to Sand Silt: Brown to light brown, trace of gravel, trace of vegetation, well graded. Dry. No staining			
		0820	10' NC			(1.6'-2') Light gray, trace of coarse sand, silty, No staining			
		0825	1.3' NC	m/sm		(2.9'-4') Similar material as 1.6'-2' core. [2.9'-3.7' Brown (3'-3.7') Light brown (3.7'-4') Light gray]. No staining			
5		0830	1.2' NC			(4.10'-6') Similar material as 2.9'-4' core. Slightly moist, slight hydrocarbon odor. Increase in fines with depth.			
		0835	2' NC	cl		(6'-8') Clay, olive green to dark gray, micaceous, trace of sand (fine grained), saturated, high plasticity, moist, No odor, does not appear stained			
10		0840	1.7' NC			(8.5'-10') Sandy Clay to Clayey Sand, olive green to dark gray, well graded sand, micaceous, moist, slight odor, does not appear stained.			
		0845	2' NC	cl/sw		(10'-12') Similar material as 8.5'-10' core. Decrease in sand content, slight hydrocarbon odor, does not appear stained.			
		0850	1.5' NC	m/sm		(12.7'-14') Silty Clay to Clayey Silt: Dark brown, trace of sand, micaceous, mottling, moist, No odor, No staining			
15		0855	1.8' NC			(14.4'-16') Similar material as 12.7'-14' core. No odor, No staining.			
		0900	1.5' NC			(16.7'-17.2') Silty Sand to Sandy Silt, gray, trace of coarse sand, micaceous, dry, No odor, No staining			
20		0905	2' NC	ml		(17.2'-18') Silt: Light gray, micaceous. No odor, No staining.			
						(18'-20') Similar material as 17.2'-18' core. No odor, No staining			

Total Depth: 20 Feet

Ground water was not encountered during drilling  
Backfilled with bentonite pellets.

Did not appear to contact sump material.

NM - Not measured

NA - Not Applicable

CC - Continuous Core

A-FIELD/FMB REV. 03/20/92

CLIENT EPA

(ALL FIELD LOGGING ON THIS FORM, ORIGINAL TO PROJECT FILES)

PROJECT NO. 94-256

ENVIRONMENTAL SOLUTIONS, INC.



DEPTH IN FEET		PID OR FID (ppm)	PENETRATION-RESISTANCE (BLOWS PER FOOT)	SAMPLE NO. AND TYPE (RECOVERY)	U.S.C.S.	PROFILE/ LITHOLOGY	<b>BORING NO.</b> <u>WDI-TS-20</u> <b>DRILLING CO./RIG</b> <u>TEG</u> <b>SAMPLER TYPE AND DIMENSION</b> <u>CONTINUOUS CORE</u> <b>FIELD ENGINEER</b> <u>A. Isaly</u> <b>EDITED BY</b> <u>A. Isaly</u> <b>CHECKED BY</b> _____	<b>SHEET</b> <u>1</u> <b>OF</b> <u>1</u> <b>COORDINATES</b> N <u>NM</u> E <u>NM</u> <b>DATE BEGAN</b> <u>10-9-97</u> <b>DATE FINISHED</b> <u>10-9-97</u> <b>GROUND SURFACE EL.</b> <u>NM</u>
<b>DESCRIPTION</b> (1.1'-1.7') SILTY SAND TO SANDY SILT; BROWN, trace of gravel, trace of coarse sand, well graded, trace of vegetation (grass & roots), dry, no staining (1.7'-2') Light gray, decrease in coarseness with depth, dry, no color, no staining. (2.3'-2.9') Brown, trace of coarse sand, well graded, no color, no staining (2.9'-3.4') Light brown, increase in sand (fine grained) content, no staining (3.4'-4') Dark brown, black, micaceous, no color, no staining (4.0'-4.6') similar material as 3.4'-4' core, no staining (4.6'-5.7') similar material as 3.4'-4' core, no staining (5.7'-6') similar material as 3.4'-4' core, no staining (6.0'-7.2') similar material as 3.4'-4' core, no staining (7.2'-8') SILTY CLAY TO CLAYEY SILT; Dark brown to brown, trace of coarse sand, slightly moist, no color, no staining (9'-10') similar material as 7.2'-8' core. No color, no staining.								
0	NA	1045	CC	11"				
5		1050	1.9'	m/s				
		1055	5"					
		1100	1.5'					
10		1105	1'	c/ml				

Total Depth: 10 Feet

GROUND WATER WAS NOT ENCOUNTERED DURING DRILLING  
Backfilled with bentonite pellets.

Did not encounter sump material.

NA - Not Applicable  
NM - Not Measured  
CC - Continuous Core

CLIENT EPA

PROJECT NO. 94-256

(ALL FIELD LOGGING ON THIS FORM, ORIGINAL TO PROJECT FILES)

ENVIRONMENTAL SOLUTIONS, INC.

Boring No.

Boring No.						MONITORING WELL WOI-TS-97 SHEET 1 OF 1	
DEPTH IN FEET	PID or FID (ppm)	PENETRATION RESISTANCE (BLOWS PER FOOT)	SAMPLE TYPE	U.S.C.S.	PROFILE/ LITHOLOGY	WELL CONSTRUCTION DETAIL	DRILLING CO./RIG
							TEG
							COORDINATES
							N <u>NM</u>
							E <u>NM</u>
							FIELD ENGINEER/ GEOLOGIST
							A. Isaly
							DATE BEGAN
							11-6-97
							EDITED BY
							A. Isaly
							DATE FINISHED
							11-6-97
							CHECKED BY
							GROUND SURFACE EL. <u>NM</u>
DESCRIPTION							
0	NA	1250	CC 1.2'				(10'-2') Silty Sand to Sandy Silt, light brown to light gray, trace of coarse sand and gravel. Broken rock fragments dry, No odor, No staining.
		1255	7"	ml/sm			(2.5'-4') Similar material as 10'-2' core. No odor, No staining.
5		1300	1'	cl/ml			(5'-6') Silty Clay to Clayey Silt, Brown, Micaceous, Moist, slightly moist, No odor, No staining.
		1305	1.3'				(6.7'-8') Clay, Dark brown, Micaceous, Moist, soft.
10		1310	1.8'				(8.4'-10') Similar material as 6.7'-8' core. Trace of sand, No odor, No staining.
		1315	1.5'	cl			(10.7'-12') similar material as 8.4'-10' core. Dark brown, No odor, No staining.
15		1320	2'				(12'-14') similar material as 10.7'-12' core. Slightly moist, stiff, No odor, No staining.
		1325	2'				(14'-16') similar material as 12'-14' core. No odor, No staining.
20							Did not encounter sump material
25							
30							
35							
40							

Did not encounter sump material

TOTAL DEPTH: 16 FEET

Did not encounter liquids.

Backfilled with bentonite pellets.

NA - Not Applicable

NM - Not Measured

CC - Continuous Core

CLIENT PROJECT NAME Unocal

A-Field/Blank MW Log REV. 04/06/92

PROJECT NO. 94-256

ENVIRONMENTAL SOLUTIONS, INC.

LOCATION Santa Fe Springs, CA

BOREING No.

MONITORING WELL WOI-TS-03 SHEET 1 OF 1								
DEPTH IN FEET	PID or FID (ppm)	PENETRATION RESISTANCE (BLOWS PER FOOT)	SAMPLE TYPE (REF.)	U.S.C.S.	PROFILE/ LITHOLOGY	WELL CONSTRUCTION DETAIL	DRILLING CO./RIG	COORDINATES
							SAMPLER TYPE AND DIMENSION	N E
							TEG	NM
							Cont. Core 1" x 2"	NM
							FIELD ENGINEER/ GEOLOGIST	DATE BEGAN
							A. Isaly	11-6-97
							EDITED BY	DATE FINISHED
							A. Isaly	11-6-97
							CHECKED BY	GROUND SURFACE EL.
								NM
4" x 6" Concrete and DESCRIPTION								
0	NA	1325	CC 8"	Concrete powder			(1.4'-2') Concrete fragments & white powder, No staining	
		1340	1.5'	ml/ sm			(2.7'-3.5') similar material as 1.4'-2' core. No staining	
5		1345	1.4'				(3.5'-4') Silty Sand to Sandy Silt, Black, trace of coarse sand and gravel, micaceous, moist, slight hydrocarbon odor, stained	
		1350	1'				(4.8'-6') Clay, Dark brown to Dark gray, trace of sand, micaceous, moist, soft, No odor, No staining	
10		1355	1.5'				(7'-8') similar material as 4.8'-6' core. Increased in fine to med grained sand content, No odor, No staining.	
		1400	2'				(8.7'-10') similar material as 7'-8' core. Decrease in sand content, stiff, No odor, No staining.	
15		1405	1.8'				(10'-12') similar material as 8.7'-10' core. No odor, No staining.	
							(12.4'-14') similar material as 10'-12' core. Brown, trace of silt, No odor, No staining	
20								
25								
30							Encountered impacted material from ~3.5' to 4' (trace) → ~6" recovery in tube.	
35							Total Depth: 14 FEET	
40							Did not encounter liquids during drilling	
							Backfilled with bentonite pellets & concrete patch	
							NA - Not Applicable	
							NM - Not Measured	
							CC - Continuous Core	

CLIENT PROJECT NAME Unocal

PROJECT NO. 94-256

LOCATION Santa Fe Springs, CA

ENVIRONMENTAL SOLUTIONS, INC.

A-Field/Blank MW Log REV. 04/06/92

**ATTACHMENT 3**

**Glossary of Terms**

## **Glossary of Terms and Acronyms for Superfund**

**Cleanup:** Actions taken to deal with a release or threatened release of hazardous substances that could affect public health or the environment. The term "cleanup" is often used broadly to describe various response actions or phases of remedial responses such as the Remedial Investigation/Feasibility Study (RI/FS).

**Community Relations:** EPA's program to inform and involve the public in the Superfund process and respond to community concerns.

**Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA):** A Federal law passed in 1980 and modified in 1986 by the Superfund Amendments and Reauthorization Act (SARA). The Acts created a special tax that goes into a Trust Fund, commonly known as Superfund, to investigate and clean up abandoned or uncontrolled hazardous waste sites. Under the program, EPA can either;

- Pay for site cleanup when parties responsible for the contamination cannot be located or are unwilling or unable to perform the work, or
- Take legal action to force parties responsible for site contamination to clean up the site or pay back the Federal government for the cost of the cleanup.

**Cost-Effective Alternative:** The cleanup alternative selected for a Superfund site based on technical feasibility, performance, reliability, and cost. The selected alternative does not require EPA to choose the least expensive alternative. It requires that if there are several cleanup alternatives available that deal effectively with the problems at a site, EPA must choose the remedy on the basis of performance, reliability, and cost.

**Feasibility Study (FS):** See Remedial Investigation/Feasibility Study (RI/FS)

**Information Repository:** A file containing the current information, technical reports, and response documents regarding a Superfund site. The Information Repository is usually located in a public building that is convenient for local residents, such as a public library.

**Operation and Maintenance (O&M):** Activities conducted at a site after a response action occurs, to ensure that the cleanup or containment system is functioning properly.

**Potentially Responsible Party (PRP):** Any individual(s) or company(s) (such as owners, operators, transporters, or generators) potentially responsible for, or contributing to, the contamination problems at a Superfund site. Whenever possible, EPA requires PRP's, through administrative and legal actions, to clean up hazardous waste sites they have contaminated.

**Proposed Plan:** The documentation of EPA's proposed remedy for a Superfund site based on the RI/FS. The Proposed Plan is put out for public comment and serves as the basis for input from all concerned parties. Comments generated from the Proposed Plan are compiled and considered by EPA and presented in the Record of Decision (ROD).

**Public Comment Period:** A time period during which the public can review and comment on various documents and EPA actions. For example, a Public Comment Period is provided when EPA proposes to a remedy at a site through a Proposed Plan.

**Public Hearing:** A public meeting held during the Public Comment Period where public testimony is taken by the EPA from any concerned parties. Comments provided during the Public Hearing are recorded in the record and are responded to by the EPA in the Response to Comments.

**Record of Decision (ROD):** A public document that explains which cleanup alternative(s) will be used at a Superfund site. The Record of Decision is based on information and technical analysis generated during the Remedial Investigation/Feasibility Study (RI/FS) and consideration of public comments and community concerns.

**Remedial Action (RA):** The actual construction or implementation phase that follows the Remedial Design of the selected cleanup alternative at a Superfund site.

**Remedial Design (RD):** An engineering phase that follows the Record of Decision when technical drawings and specifications are developed for the subsequent Remedial Action at a Superfund site.

**Remedial Investigation/Feasibility Study (RI/FS):** Two distinct but related studies. They are usually performed at the same time, and together referred to as the "RI/FS". They are intended to:

- Gather the data necessary to determine the type and extent of contamination at a Superfund site;
- Established criteria for cleaning up the site;
- Identify and screen cleanup alternatives for Remedial Action;
- Analyze in detail the technology and costs of the alternatives.

**Remedial Project Manager (RPM):** The EPA official responsible for overseeing the Remedial Response activities at a Superfund site.

**Responsiveness Summary:** A summary of both oral and written public comments received by EPA during a Public Comment Period on key EPA documents and EPA's response to those comments. The Responsiveness Summary is included in the Record of Decision as the record of community concerns for EPA decision-makers.

**Superfund:** The common name used for the Comprehensive Environmental Response, Compensation, and Liability Act.

**Waste Disposal, Inc. Group (WDIG):** The group of corporations identified as Potentially Responsible Parties that are named in EPA's enforcement order to perform investigations and remedial design activities for the WDI site.

## **Acronyms**

**CERCLA:** Comprehensive Environmental Response, Compensation, and Liability Act

**FS:** Feasibility Study

**O&M:** Operations & Maintenance

**PRP:** Potentially Responsible Parties

**ROD:** Record of Decision

**RA:** Remedial Action

**RD:** Remedial Design

**RI/FS:** Remedial Investigation/Feasibility Study

**RPM:** Remedial Project Manager

**WDIG:** Waste Disposal, Inc. Group